REMARKS

By this amendment, Applicants have amended the claims to more clearly define their invention. In particular, claim 1 has been amended to recite that each of the plural number of air-lock type inlet/outlet includes at least one check valve keeping an inside of the first chamber at a positive pressure compared to an outside. See, e.g., check valves v1 and v2 in Figure 1 and the description thereof in Applicants' specification, e.g., at page 5, line 29 to page 6, line 13 of Applicants' specification. Claims 3 and 13 have been amended to be consistent with the amendments to claim 1. Applicants have also added new claims 17-20 to further define their invention. Claim 17 corresponds to original claim 1 but recites "a plural number of air-locks provided in said first chamber, each of said plural number of air-locks having an inlet and an outlet" instead of a "plural number of air-lock type inlet/outlets, being provided in said first chamber."

Applicants traverse the finality of the outstanding Office Action. The outstanding Office Action clearly includes new grounds of rejection, i.e., the rejections in numbered sections 2 and 3 of the Office Action relying on the newly cited Ammann et al. publication. Noting that original claim 1 was not amended by the amendment filed August 16, 2007, at least the rejection of claim 1 over Ammann et al. in view of Felder et al. in numbered section 2 of the Office Action was not necessitated by amendment. Accordingly, the finality of the Office Action is premature and must be withdrawn.

Claims 1, 4, 6 and 7 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,467,285 to Felder et al. Applicants traverse this rejection and request reconsideration thereof.

The present invention relates to a culturing apparatus for culturing cellular tissues therein. The apparatus includes, as shown by way of example only in Figure

1, a first chamber 5, a plural number of air-lock type inlet/outlets (air locks) 11-14, being provided in the first chamber 5, a second chamber 20 for culturing the cells therein, a manipulator 30, 32 operating within the first chamber 5, through remote or an automatic control, wherein the manipulator 30, 32 can access to both, at least one of the air-lock input/outputs 11-14 and the second chamber 20. As set forth in amended claim 1, each of the plural number of air-lock type inlets/outlets 11-14 includes at least one check valve v1 or v2, keeping an inside of the first chamber 5 at a positive pressure compared to an outside. A set forth in claims 17-20, a plural number of air-locks 11-14 are provided in the first chamber 5. The apparatus may further include control means for controlling flow, temperature or humidity of gas communicating within the first chamber. Such an apparatus is not disclosed by Felder et al.

The Felder et al. patent discloses an automated cold storage apparatus. Such an apparatus is useful for storing biological samples at below-freezing temperatures in order to preserve them for future reference, analysis or use. As shown in, e.g., Figures 1, 2A and 3 of this patent, the apparatus 1 has a freezer compartment 10 and a climate controlled chamber 60 that is generally disposed on a wall 11 of the freezer compartment 10 or associated housing 2. While the Examiner equates the climate control chamber 60 of Felder et al. to the first chamber of the present invention, the freezer compartment 10 of Felder et al. to the second chamber of the present invention and the doors 61, 62 of the chamber 60 of Felder et al. to the air-lock inlet/outlets of the present invention, it is submitted the analysis in the outstanding Office Action is incorrect and the Felder et al. patent does not disclose the presently claimed invention.

In Felder et al., the climate control chamber 60 with its interior door 61 and exterior door 62 form a type of air-lock inlet/outlet for chamber 10. Even if one

equates the chamber 10 of Felder et al. to the first chamber of the present invention and the climate chamber 60 with its doors 61, 62 to one of the air-lock type inlet/outlets of the present invention, then the Felder et al. patent does not disclose a second chamber for culturing cells or a plural number of air-lock type inlet/outlets (air locks in claims 17-20).

The freezer compartment 10 of Felder et al. is not the equivalent of the second chamber for culturing cells of the present invention for a number of reasons. First, the compartment 10 is a freezer compartment, not a compartment for culturing cells. Secondly, even if the compartment 10 is equivalent to the second chamber of the present invention, it is submitted there is then no first chamber having a plural number of air-lock type inlet/outlets (air locks in claims 17-20) provided. Thirdly, the reference numerals 61 and 62 to which the Examiner refers as inlet/outlets are merely doors on the single climate control chamber 60, not a plural number of air-lock type inlet/outlets (air locks in claims 17-20). Nor does the Felder et al. patent disclose that the doors 61, 62 include at least one check valve keeping an inside of the chamber 10 at a positive pressure compared to an inside.

Thus, as set forth in claims 1-16, the culturing apparatus according to the present invention has such the structure that an inside of the first chamber is kept to be positive in pressure compared to that of an outside. This prevents a contamination gas from being mixed into the inside of the first chamber from an outside thereof. And, further, due to the function of the "check valve," the gas flow (or airflow) is also prevented from running from the outside of the first chamber into the inside thereof; thereby achieving a special effect, i.e., protecting the inside of the first chamber from being contaminated.

The culturing apparatus of the present invention, include a number of plural number of air-lock type inlets/outlets (air-locks in claims 17-20), or the air-lock type

inlets/outlets, each with at least one check valve keeping inside of the first chamber at a positive pressure compared to an inside, is neither disclosed nor suggested by Felder et al.

Claims 1, 2, 4-7, 10-12 and 14-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0137197 A1 to Ammann et al. in view of Felder et al. Applicants traverse this rejection and request reconsideration thereof.

The Ammann et al. publication discloses an automated analyzer for performing multiple diagnostic assays simultaneously. The analyzer includes multiple stations, or modules, in which discrete aspects of the assay are performed on fluid samples contained in reaction receptacles. It appears the Examiner admits that the Ammann et al. publication does not disclose the culturing apparatus of the present invention including a plural number of air-lock type inlets/outlets (or air-locks as set forth in claims 17-20). The Examiner relies on the teachings of Felder et al. for at least this feature. However, this feature is not described in Felder et al. for the reasons noted above. Accordingly, the presently claimed is not obvious over the combination of Ammann et al. and Felder et al.

Claims 3 and 13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ammann et al. in view of Felder et al. and further in view of U.S. Patent No. 6,974,197 to Henry et al. Applicants traverse this rejection and request reconsideration thereof.

The patent to Henry et al. discloses a portable containment system including a glove box apparatus, a self-contained filter unit, and removable conduits extending therebewteen. The Examiner alleges Henry to disclose that an air-lock inlet/outlet is fitted with a connection tube (Figure 4, element 80) and a check valve (Figure 4, element 67) capable of removing air from the air-lock inlet/outlet. However, element

67 (appearing in Figure 8) is not a check valve but a shut-off valve. Accordingly, the Henry et al. patent does not provide any reason to include a check valve (not a shut off valve) in a culturing apparatus. Therefore, claims 3 and 13 are patentable over the proposed combination of Ammann et al., Felder et al. and Henry et al.

In view of the foregoing amendments and remarks, withdrawal of the finality of the Office Action, entry of this amendment and favorable reconsideration and allowance of all of the claims now in the application are requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 500.43499X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

/Alan E. Schiavelli/
Alan E. Schiavelli
Registration No. 32,087

AES/at
(703) 312-6600